

00-120 Checking cylinders for leakage

Data

Total pressure loss	max. 25 %
at valves and cylinder head gasket	max. 10 %
at pistons and piston rings	max. 20 %

Special tool

Socket 27 mm to crank engine	 11004-6193	001 589 65 09 00
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Commercially available tool

Cylinder leakage tester	e.g. Bosch, EFAW 210 A SUN, CLT 228
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Checking

- 1 Warm up engine to operating temperature.
- 2 Unscrew glow plugs.
- 3 On engine models 615 and 616 featuring injection pumps with pneumatic governors, detach rubber garter at throttle body and set throttle valve to full delivery.

On engines featuring injection pumps with mechanical governors, detach air filter.

- 4 Remove oil filler cap.
- 5 Remove radiator cap and top up coolant.
- 6 Screw connector into glow plug hole of No. 1 cylinder.

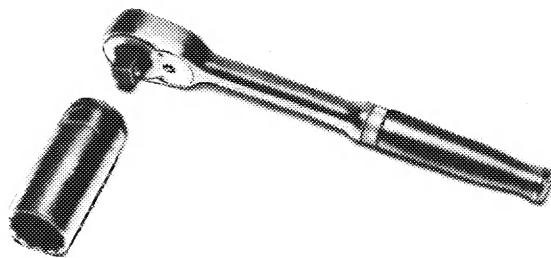
7 Set piston of No. 1 cylinder to ignition TDC.

To do so, turn engine at crankshaft, using tool combination.

8 Connect cylinder leakage tester to air system.
Calibrate tester.

9 Screw tester connecting hose to connector.

Make sure that crankshaft does not turn.

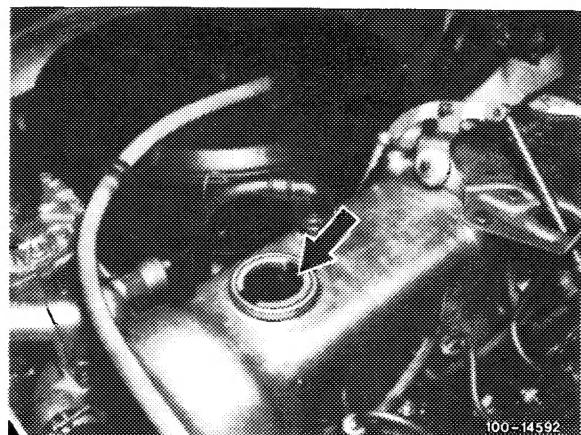


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10 Note pressure loss on tester.

11 Listen to check whether pressure escapes through intake pipe, exhaust, oil filler cap, glow plug hole of adjacent cylinder or radiator cap.

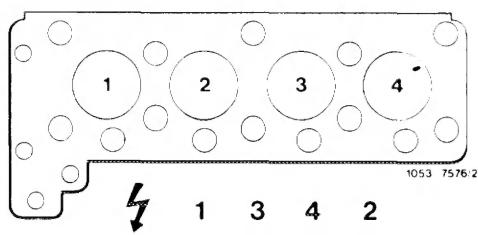
12 Check all cylinders in firing order.



Note: The reading will be falsified if the piston ring gaps of a particular piston are directly above one another.

In case of doubt, continue to run engine and then check cylinders for leakage again after some time has elapsed.

Engines 615, 616



Engine 617

